

## REMARKS

A reconsideration is respectfully requested of Claims 9-28, wherein Claims 9, 16 and 22 have been amended.

Claims 9-11, 14-17, 20-24, 27 and 28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,231,817 to *Sadler* in view of U.S. Patent No. 3,679,509 to *Fielibert* and further view of U.S. Patent No. 3,381,441 to *Condo et al.* Claims 12, 18, and 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sadler* in view of *Fielibert* and further view of U.S. Patent No. 5,347,795 to *Fukuda*. Claims 13, 19 and 26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sadler* in view of *Fielibert* and further in view of U.S. Patent No. 5,787,690 to *Konno et al.*

Independent Claims 9, 16 and 22 are all directed to novel combination of features including a heat-sealing device comprising a seal jaw and a counter jaw both including an operation surface that faces and contacts the seal zone during transverse sealing under the liquid surface of the liquid food. The operation surface of the seal jaw is a flat surface. Independent Claims 9, 16 and 22 have all been amended to further recite that the operation surface of the counter jaw is formed with at least two raised ridges or at least two chevron-shaped elements. These features are shown in Figures 7 and 8 and paragraphs [0038] – [0040] of the specification. The two raised ridges or two chevron-shaped elements form an accumulated portion or mixed portion therebetween. None of the art of record disclosed these patentable features.

In *Sadler*, the jaw 31 of the transverse impulse sealer comprises an electrical impulse sealing element 49 that meets with a convex silicon backing pad 48 on jaw

31. As such, the operation surface of the seal jaw 30 in *Sadler* does not include two raised ridges or two chevron-shaped elements.

*Fielibert* discloses two heated jaws 9 and 11, wherein the temperature of the upper jaw 11 is 225°C, and temperature of the lower jaw 9 is 200°C, as described at column 3, lines 19-23. *Fielibert* does not disclose an operation surface that includes two raised ridges or two chevron-shaped elements, as now defined in the independent claims.

Finally, *Condo et al.* does not overcome the above-noted deficiencies in *Sadler* and *Fielibert*, because *Condo et al.* does not disclose the features of at least two raised ridges or two chevron-shaped elements of the counter jaw for removing from the seal zone seal prevention impurities.

For at least the foregoing reasons, it is submitted that the heat sealing device of independent Claims 9, 16 and 22, and the claims depending therefrom, is patentably distinguishable over the applied documents. Accordingly, withdrawal of the rejections of record and allowance of this application are earnestly solicited.

Should any questions arise in connection with this application, or should the Examiner believe a telephone conference would be helpful in resolving any remaining issues pertaining to this application, the undersigned respectfully requests that she be contacted at the number indicated below.

Respectfully submitted,

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